(9) SP–58 Pipe Hangers and Supports–Materials, Design and Manufacture (1993) (''MSS SP–58''), 56.60–1;

(10) SP–61–2003 Pressure Testing of Steel Valves (2003) (''MSS SP–61''), 56.60–1;

(11) SP–67 Butterfly Valves (1995) (''MSS SP–67''), 56.60–1;

(12) SP–69 Pipe Hangers and Supports–Selection and Application (1996) (''MSS SP–69''), 56.60–1;

(13) SP–72 Ball Valves with Flanged or Butt-Welding Ends for General Service (1987) (''MSS SP–72''), 56.60–1;

(14) SP–73 (R 96) Brazing Joints for Copper and Copper Pressure Fittings (1991) (''MSS SP–73''), 56.60–1; and

(15) SP–83 Class 3000 Steel Pipe Unions, Socket Welding and Threaded (1995) (''MSS SP–83''), 56.60–1;

(l) *Society of Automotive Engineers (SAE)*, 400 Commonwealth Drive, Warrendale, PA 15096:

(1) J1475 (1996) Surface Vehicle Hydraulic Hose Fittings for Marine Applications (June 1996) (''SAE J1475''), 56.60–25; and

(2) J1942 (1997) Standards Hose and Hose Assemblies for Marine Applications (May 1997) (''SAE J1942''), 56.60–25.

[USCG–2003–16630, 73 FR 65171, Oct. 31, 2008, as amended by USCG–2009–0702, 74 FR 49228, Sept. 25, 2009]

§ 56.01–3 Power boilers, external piping and appurtenances (Replaces 100.1.1, 100.1.2, 122.1, 132 and 133).

(a) Power boiler external piping and components must meet the requirements of this part and §§ 52.01–105, 52.01–110, 52.01–115, and 52.01–120 of this chapter.

(b) Specific requirements for external piping and appurtenances of power boilers, as defined in §§ 100.1.1 and 100.1.2, appearing in the various paragraphs of ASME B31.1 (incorporated by reference; see 46 CFR 56.01–2), are not adopted unless specifically indicated elsewhere in this part.

[CGD 77–140, 54 FR 40602, Oct. 2, 1989; 55 FR 39968, Oct. 1, 1990; USCG–2003–16630, 73 FR 65174, Oct. 31, 2008]

§ 56.01–5 Adoption of ASME B31.1 for power piping, and other standards.

(a) Piping systems for ships and barges must be designed, constructed, and inspected in accordance with ASME B31.1 (incorporated by reference; see 46 CFR 56.01–2), as limited, modified, or replaced by specific requirements in this part. The provisions in the appendices to ASME B31.1 are adopted and must be followed when the requirements of ASME B31.1 or the rules in this part make them mandatory. For general information, Table 56.01–5(a) lists the various paragraphs and sections in ASME B31.1 that are limited, modified, replaced, or reproduced by rules in this part.

TABLE 56.01–5(a)—LIMITATIONS AND MODIFICATIONS IN THE ADOPTION OF ASME B31.1 FOR PRESSURE AND POWER PIPING

Section or paragraph in ASME B31.1 and disposition	Unit in this part
100.1 replaced by	56.01–1.
100.2 modified by	56.07–5.
101 through 104.7 modified by.	56.07–10.
101.2 modified by	56.07–10(a), (b).
101.5 replaced by	56.07–10(c).
102.2 modified by	56.07–10(d).
102.3 and 104.1.2 modified by.	56.07–10(e).
104.3 modified by	56.07–10(f).
104.4 modified by	56.07–10(e).
104.5.1 modified by	56.30–10.
105 through 108 replaced by	56.10–1 through 56.25–20.
110 through 118 replaced by	56.30–1 through 56.30–35.
119.5.1 replaced by	56.35–10, 56.35–15.
119.7 replaced by	56.35–1.
122.1.4 replaced by	56.50–40.
122.3 modified by	56.50–97.
122.6 through 122.10 replaced by.	56.50–1 through 56.50–80.
123 replaced by	56.60–1.
Table 126.1 is replaced by	56.30–5(c)(3), 56.60–1.
127 through 135 replaced by	56.65–1, 56.70–10 through 56.90–10.
136 replaced by	56.95–1 through 56.95–10.
137 replaced by	56.97–1 through 56.97–40.

(viii) (b) When a section or paragraph of the regulations in this part relates to material in ASME B31.1, the relationship with ASME B31.1 will appear immediately after the heading of the section or at the beginning of the paragraph as follows:

(1) (Modifies ____.) This indicates that the material in ASME B31.1 so numbered for identification is generally applicable but is being altered, amplified, or augmented.

(2) (Replaces ____.) This indicates that the material in ASME B31.1 so numbered for identification does not apply.

(3) (Reproduces ____.) This indicates that the material in ASME B31.1 so

numbered for identification is being identically reproduced for convenience, not for emphasis.

(c) As stated in § 56.01–2 of this chapter, the standards of the American National Standards Institute (ANSI) and ASME specifically referred to in this part must be the governing requirements for the matters covered unless specifically limited, modified, or replaced by other rules in this subchapter. See 46 CFR 56.60–1(b) for the other adopted commercial standards applicable to piping systems that also constitute this subchapter.

[USCG–2003–16630, 73 FR 65175, Oct. 31, 2008]

§ 56.01–10 Plan approval.

(a) Plans and specifications for new construction and major alterations showing the respective piping systems shall be submitted, as required by subpart 50.20 of this subchapter.

(b) Piping materials and appliances, such as pipe, tubing, fittings, flanges, and valves, except safety valves and safety relief valves covered in part 162 of subchapter Q (Specifications) of this chapter, are not required to be specifically approved by the Commandant, but shall comply with the applicable requirements for materials, construction, markings, and testing. These materials and appliances shall be certified as described in part 50 of this subchapter. Drawings listing material specifications and showing details of welded joints for pressure-containing appurtenances of welded construction shall be submitted in accordance with paragraph (a) of this section.

(c)(1) Prior to installation aboard ship, diagrams of the following systems shall be submitted for approval:

(i) Steam and exhaust piping.

(ii) Boiler feed and blowoff piping.

(iii) Safety valve escape piping.

(iv) Fuel oil service, transfer and filling piping. (Service includes boiler fuel and internal combustion engine fuel piping.)

(v) Fire extinguishing systems including fire main and sprinkler piping, inert gas and foam.

(vi) Bilge and ballast piping.

(vii) Tank cleaning piping.

(viii) Condenser circulating water piping.

(ix) Vent, sound and overflow piping.

(x) Sanitary drains, soil drains, deck drains, and overboard discharge piping.

(xi) Internal combustion engine exhaust piping. (Refer to part 58 of this subchapter for requirements.)

(xii) Cargo piping.

(xiii) Hot water heating systems if the temperature is greater than 121 °C(250 °F).

(xiv) Compressed air piping.

(xv) Fluid power and control systems (hydraulic, pneumatic). (Refer to subpart 58.30 of this subchapter for specific requirements.)

(xvi) Lubricating oil piping.

(xvii) Refrigeration and air conditioning piping. (Refer to part 58 of this subchapter for specific requirements.)

(2) Arrangement drawings of the following systems shall also be submitted prior to installation:

(i) All Classes I, I-L, and II-L systems.

(ii) All Class II firemain, foam, sprinkler, bilge and ballast, vent sounding and overflow systems.

(iii) Other Class II systems only if specifically requested or required by regulations in this subchapter.

(d)(1) The drawings or diagrams shall include a list of material, furnishing pipe diameters, wall thicknesses, design pressure, fluid temperature, applicable ASTM material or ANSI component specification, type, size, design standard, and rating of valves, flanges, and fittings.

(2) Pump rated capacity and pump shutoff head shall appear on piping diagrams. Pump characteristic curves shall be submitted for all pumps in the firemain and foam systems. These curves need not be submitted if the following information is shown on the drawing:

(i) Rated capacity and head at rated capacity.

(ii) Shutoff head.

(iii) Head at 150 percent rated capacity.

(3) Standard drawings of the following fabrication details shall be submitted:

(i) Welding details for piping connections.

(ii) Welding details for nonstandard fittings (when appropriate).

(d–1) Plans of piping for industrial systems on mobile offshore drilling